

PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY

**H.A. Parts Products of Indiana Company
2200 State Road 240 East
Greencastle, Indiana 46135**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 133-14228-00019	
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: January 10, 2002

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SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary plastic automotive trim surface coating operation.

Responsible Official:	Toshi Ohki, President
Source Address:	2200 State Road 240 East, Greencastle, Indiana 46135
Mailing Address:	P.O. Box 157, Greencastle, Indiana 46135
General Source Phone Number:	765-653-2000
SIC Code:	3089, 3465
County Location:	Putnam
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules;

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) one (1) robot paint conveyor system, consisting of the following:
 - (1) one (1) Loading Clean Room;
 - (2) one (1) Primer coat pump room, exhausting through one (1) stack (ID Stack #1);
 - (3) one (1) Primer coat spray booth, equipped with a closed loop internal mix system and a water wash system for particulate matter overspray control, exhausting through one (1) stack (ID Stack #2);
 - (4) one (1) Primer coat flash off tunnel, exhausting through one (1) stack (ID Stack #3);
 - (5) one (1) Base coat pump room, exhausting through one (1) stack (ID Stack #4);
 - (6) one (1) Base coat spray booth, equipped with a closed loop internal mix system and a water wash system for particulate matter overspray control, exhausting through two (2) stacks (ID Stacks #5 and #6);
 - (7) one (1) Base coat flash off tunnel, exhausting through one (1) stack (ID Stack #7);
 - (8) one (1) Clear coat pump room, exhausting through one (1) stack (ID Stack #8);
 - (9) one (1) Clear coat spray booth, equipped with a closed loop internal mix system and a water wash system for particulate matter overspray control, exhausting through one (1) stack (ID Stack #9);
 - (10) one (1) Clear coat flash off tunnel, exhausting through one (1) stack (ID Stack #10);
 - (11) one (1) convection curing oven, exhausting through three (3) stacks (ID Stacks #11, #12, and #13), equipped with two (2) indirect natural gas-fired heater boxes, each rated at 1.5 million British thermal units (MMBtu) per hour, exhausting through two (2) stacks (ID Stacks #14 and #15); and
 - (12) one (1) clean room for unloading of painted parts.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
 - (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
 - (2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.
 - (3) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will issued after EPA review.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.9 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:
- (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.

- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.10 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
 - (g) Operations may continue during an emergency only if the following conditions are met:

- (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

**C.11 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.12 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.13 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this permit shall be submitted to:
- Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) one (1) robot paint conveyor system, consisting of the following:
 - (1) one (1) Loading Clean Room;
 - (2) one (1) Primer coat pump room, exhausting through one (1) stack (ID Stack #1);
 - (3) one (1) Primer coat spray booth, equipped with a closed loop internal mix system and a water wash system for particulate matter overspray control, exhausting through one (1) stack (ID Stack #2);
 - (4) one (1) Primer coat flash off tunnel, exhausting through one (1) stack (ID Stack #3);
 - (5) one (1) Base coat pump room, exhausting through one (1) stack (ID Stack #4);
 - (6) one (1) Base coat spray booth, equipped with a closed loop internal mix system and a water wash system for particulate matter overspray control, exhausting through two (2) stacks (ID Stacks #5 and #6);
 - (7) one (1) Base coat flash off tunnel, exhausting through one (1) stack (ID Stack #7);
 - (8) one (1) Clear coat pump room, exhausting through one (1) stack (ID Stack #8);
 - (9) one (1) Clear coat spray booth, equipped with a closed loop internal mix system and a water wash system for particulate matter overspray control, exhausting through one (1) stack (ID Stack #9);
 - (10) one (1) Clear coat flash off tunnel, exhausting through one (1) stack (ID Stack #10);
 - (11) one (1) convection curing oven, exhausting through three (3) stacks (ID Stacks #11, #12, and #13), equipped with two (2) indirect natural gas-fired heater boxes, each rated at 1.5 million British thermal units (MMBtu) per hour, exhausting through two (2) stacks (ID Stacks #14 and #15); and
 - (12) one (1) clean room for unloading of painted parts.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to the BACT determination under 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), operation of the robot paint conveyor system without the use of add-on controls and with the following work practice and emission limitation will satisfy the BACT requirements:

- (a) The coatings applied in each of the primer coat spray booth, the base coat spray booth, and the clear coat spray booth shall be applied using High Volume Low Pressure (HVLP) Spray Application guns.

HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (b) The total usage of VOC in the primer coat spray booth, the base coat spray booth, and the clear coat spray booth shall not exceed 97.85 tons per twelve (12) consecutive month period.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the PM from the three (3) paint booths (primer spray booth, base coat spray booth, and clear coat spray booth) in the robot paint conveyor system shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.4 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.1.5 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the twelve (12) month period.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Particulate Matter (PM)

In order to comply with D.1.2, the closed loop internal mix system and water wash system for PM control shall be in operation and control emissions from the primer spray booth, the base coat spray booth, and the clear coat spray booth at all times when the three (3) paint booths are in operation.

D.1.7 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particulate loading of the water wash system. To monitor the performance of the water wash system, weekly observations shall be made of the overspray from the surface coating booth stacks (Stack ID #2, #5, #6, and #9) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.8 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include paint mix records for each shift of each operation where coatings and solvents are used and environmental data sheets necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Conditions D.1.6 and D.1.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name: H.A. Parts Products of Indiana Company
Source Address: 2200 State Road 240 East, Greencastle, Indiana 46135
Mailing Address: P.O. Box 157, Greencastle, Indiana 46135
Source Modification No.: 133-14228-00019

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: H.A. Parts Products of Indiana Company
Source Address: 2200 State Road 240 East, Greencastle, Indiana 46135
Mailing Address: P.O. Box 157, Greencastle, Indiana 46135
Source Modification No.: 133-14228-00019
Facility: robot paint conveyor system
Parameter: VOC usage
Limit: The total usage of VOC in the primer coat spray booth, the base coat spray booth, and the clear coat spray booth shall not exceed 97.85 tons per twelve (12) consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	VOC Usage This Month (tons)	VOC Usage Previous 11 Months (tons)	12 Month Total VOC Usage (tons)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Mail to: Permit Administration & Development Section
Office of Air Quality
100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

H.A. Parts Products of Indiana Company
P.O. Box 157
Greencastle, Indiana 46135

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____.
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make
these representations on behalf of _____.
(Company Name)
4. I hereby certify that H.A. Parts Products of Indiana Company, 2200 State Road 240 East, Greencastle, Indiana 46135, has constructed the new robot paint conveyor system in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on April 4, 2001, and as permitted pursuant to **Source Modification No. 133-14228-00019** issued on _____.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of
Indiana on this _____ day of _____, 20 _____.
My Commission expires: _____

Signature

Name (typed or printed)

**Indiana Department of Environmental Management
Office of Air Quality**

**Addendum to the
Technical Support Document for a Part 70 Significant Source Modification**

Source Name:	H.A. Parts Products of Indiana Company
Source Location:	2200 State Road 240 East, Greencastle, Indiana 46135
County:	Putnam
SIC Code:	3089, 3465
Operation Permit No.:	T133-12660-00019
Operation Permit Issuance Date:	Pending
Source Modification No.:	SSM 133-14228-00019
Permit Reviewer:	Trish Earls/EVP

On September 13, 2001, the Office of Air Quality (OAQ) had a notice published in the Banner Graphic, Greencastle, Indiana, stating that H.A. Parts Products of Indiana Company had applied for a Part 70 significant source modification. The significant source modification was for the construction and operation of a new robot paint conveyor system to coat plastic automotive parts. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On October 15, 2001, Bill Emanuel of H.A. Parts Products of Indiana Company (HAPPICO) submitted comments on the proposed permit. The comments and the corresponding responses are as follows:

Comment #1

On October 1, 2001, HAPPICO implemented the application of HVLP paint spray guns. All of the calculations submitted with the Significant Source Modification application were based on the use of conventional paint spray guns. Please revise the coating usages in the robot paint conveyor system to reflect the use of HVLP guns which reduce the amount of coating used by approximately 20% based on manufacturers information.

Response #1

Due to the decrease in coating usage by using HVLP spray guns, potential VOC emissions have been reduced from 122.47 tons per year to 97.85 tons per year as shown on the revised emission calculation spreadsheet in Appendix A, page 1. Therefore, the VOC emission limit included in the Best Available Control Technology (BACT) determination pursuant to 326 IAC 8-1-6 will be revised accordingly. Condition D.1.1 of the Significant Source Modification is revised to read as follows:

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to the BACT determination under 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), operation of the robot paint conveyor system without the use of add-on controls and with the following work practice and emission limitation will satisfy the BACT requirements:

- (a) The coatings applied in each of the primer coat spray booth, the base coat spray booth, and the clear coat spray booth shall be applied using High Volume Low Pressure (HVLP) Spray Application guns.

HVLP spray is the technology used to apply coating to substrate by means of coating

application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (b) The total usage of VOC in the primer coat spray booth, the base coat spray booth, and the clear coat spray booth shall not exceed ~~122.47~~ **97.85** tons per twelve (12) consecutive month period.

The quarterly report form for this limit has also been revised accordingly.

The OAQ prefers that the Technical Support Document (TSD) reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The Potential to Emit After Controls for the Modification table in the TSD now reflects the revised VOC emissions from the robot paint conveyor system as follows:

Potential to Emit After Controls for the Modification

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Robot Paint Conveyor System	0.68 0.55	0.68 0.55	0.0	122.47 97.85	0.0	0.0	23.74 18.97
Two (2) heater boxes	0.02	0.10	0.01	0.07	1.10	1.31	<0.1
Total Emissions	0.70 0.57	0.78 0.65	0.01	122.54 97.92	1.10	1.31	23.74 18.97
PSD Significant Modification Threshold	250	250	250	250	250	250	N/A

The BACT determination under the State Rule Applicability section of the TSD now reads as follows:

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

This modification is subject to the provisions of 326 IAC 8-1-6. This rule requires all facilities constructed after January 1, 1980, which have potential VOC emission rates of greater than or equal to 25 tons per year, and which are not otherwise regulated by other provisions of 326 IAC 8, to reduce VOC emissions using Best Available Control Technology (BACT). Potential VOC emissions from the proposed robot paint conveyor system are greater than 25 tons per year, therefore, the modification is subject to this rule.

The first step in evaluating potential applicable control technologies involved a review of control technology determinations made for permitted sources in the plastic part surface coating

industry. Based on a comprehensive review of USEPA's RACT /BACT /LAER clearinghouse (RBLC), the top five control technology determinations from similar facilities were identified. They are as follows listed in top-down order from the most effective to the least effective in terms of emission reduction potential/lowest emission rate:

- (1) Use of a catalytic incinerator at a maximum coating throughput of 14 gallons per hour and a maximum VOC content of 1.03 pounds of VOC per gallon of coating applied.
- (2) Use of reformulated coatings with a maximum VOC content of 3.5 pounds of VOC per gallon of coating.
- (3) Use of a thermal incinerator at a maximum coating throughput of 4,697 gallons of coating per month and a maximum VOC emission rate of 78.04 pounds per hour.
- (4) Use of HVLP applicators at a maximum VOC content of 6.3 pounds of VOC per gallon of coating.
- (5) Use of HVLP applicators at a maximum coating throughput of 2,480 gallons per month and a maximum VOC content of 6.08 pounds of VOC per gallon of coating.

Based on the above information, the following observations were made:

- (1) The above sources required to use add-on controls such as catalytic and thermal incinerators have maximum coating usages that are over two times greater than the proposed robot paint conveyor system. The resulting higher VOC emissions at those sources makes operation of those control options more likely to be economically feasible for those sources. A cost analysis was done as part of this BACT analysis on using catalytic and thermal oxidation to control VOC emissions. This is presented below.
- (2) The use of reformulated coatings with a maximum VOC content of 3.5 pounds of VOC per gallon of coating is currently being investigated by H.A. Parts Products of Indiana Company (HAPPICO). The use of these coatings requires customer approval making it infeasible to use these coatings at this time.
- (3) Use of HVLP applicators in the proposed robot paint conveyor system is considered a technically feasible control option.

Control technologies that could be potentially implemented are identified as follows:

- (1) Process Changes
 - (a) Use of waterborne coatings - these coatings are not used for exterior auto paint because of increased drying time and problems with color matching. Therefore, this option is technically infeasible.
 - (b) Use of powder coatings - these coatings have limited application for plastic parts. They require a high cure temperature and it is difficult to achieve the required quality. Therefore, this option is technically infeasible.
 - (c) Use of high solids solvents - this option is currently being investigated by HAPPICO. Customer approval is required which prevents a determination being made at this time as to the technical feasibility of this option.
- (2) Equipment Modifications
 - (a) Use of HVLP paint guns - this option is technically feasible. HAPPICO is presently purchasing HVLP paint guns and plans to implement the application of HVLP paint guns by October, 2001.
- (3) Add-on Control Equipment
 - (a) Regenerative Thermal Oxidizer (RTO) - this option is technically feasible.
 - (b) Regenerative Catalytic Oxidizer (RCO) - this option is technically feasible.

The technically feasible options are RTO, RCO and use of HVLP spray guns. A cost analysis was performed to determine the economic feasibility of RTO and RCO for the VOC emissions from the proposed robot paint conveyor system. The cost analysis is based on potential VOC emissions of ~~122.47~~ **97.85** tons per year.

The tables below show the results of the cost analysis.

(A)

Capital Cost

Option	Base Price	Direct Cost	Indirect Cost	Total
RTO or RCO*	933,842	338,400	117,612	1,389,854

* In doing the economic analysis, HAPPICO found the capital cost of the RTO and the RCO systems were close to being the same. If the capital cost of one system is a little less than the other, the operating cost will be higher. Therefore, for purposes of this analysis, HAPPICO used the RTO system costs for which a detailed vendor quote was obtained.

(B)

Annual Operating, Maintenance & Recovery Cost

Option	Direct Cost	Indirect Cost	Capital Recovery Cost	Total
RTO or RCO	495,591	77,194	339,124	911,909

(C)

Evaluation

Option	Potential Emissions (tons/yr)	Emissions Removed (tons/yr)	Control Efficiency (%)	\$/ton Removed
RTO or RCO	122.47 97.85	120.02 95.89	98	7,598 9,510

Methodology:

Emissions removed = (limited potential emissions from warehouse) * (control efficiency)

\$/ton removed = total annual cost / emissions removed

The cost breakdown is as follows:

1. Capital Cost
 - a) Base price: purchase price, auxiliary equipment, instruments, controls, taxes and freight.
 - b) Direct installation cost: foundations/supports, erection/handling, electrical, piping, insulation, painting, site preparation and building/facility.
 - c) Indirect installation cost: engineering, supervision, construction/filed expenses, construction fee, start up, performance test, model study and contingencies.
2. Annual Cost
 - a) Direct operating cost: operating labor (operator, supervisor), labor and material maintenance, operating materials, utilities (electricity, gas).
 - b) Indirect operating cost: overhead, property tax, insurance, administration and capital recovery cost (for 10 years life of the system at 10% interest rate).

Based on the cost analysis, RTO and RCO are economically infeasible. The annual cost of ~~\$7,598~~ **\$9,510** per ton of VOC removed would cause HAPPICO's operation to be noncompetitive

as a tier 1 automotive supplier. Therefore, no control with the use of HVLP spray guns is the only feasible option. HAPICO expects to reduce VOC emissions by 20% with the use of HVLP spray guns. The use of the HVLP spray guns and a maximum VOC emission rate of ~~122.47~~ **97.85** tons per year has been determined to be BACT.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification

Source Background and Description

Source Name:	H.A. Parts Products of Indiana Company
Source Location:	2200 State Road 240 East, Greencastle, IN 46135
County:	Putnam
SIC Code:	3089, 3465
Operation Permit No.:	T133-12660-00019
Operation Permit Issuance Date:	Still Pending
Source Modification No.:	133-14228-00019
Permit Reviewer:	Trish Earls/EVP

The Office of Air Quality (OAQ) has reviewed a modification application from H.A. Parts Products of Indiana Company relating to the construction and operation of a new robot paint conveyor system.

History

On April 4, 2001, H.A. Parts Products of Indiana Company submitted an application to the OAQ requesting to add an additional robot paint conveyor system for surface coating of plastic automotive parts at their existing plant. H.A. Parts Products of Indiana Company applied for a Part 70 permit on August 25, 2000 which is still pending with the OAQ.

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following equipment:

- (a) one (1) robot paint conveyor system, consisting of the following:
 - (1) one (1) Loading Clean Room;
 - (2) one (1) Primer coat pump room, exhausting through one (1) stack (ID Stack #1);
 - (3) one (1) Primer coat spray booth, equipped with a closed loop internal mix system and a water wash system for particulate matter overspray control, exhausting through one (1) stack (ID Stack #2);
 - (4) one (1) Primer coat flash off tunnel, exhausting through one (1) stack (ID Stack #3);
 - (5) one (1) Base coat pump room, exhausting through one (1) stack (ID Stack #4);
 - (6) one (1) Base coat spray booth, equipped with a closed loop internal mix system and a water wash system for particulate matter overspray control, exhausting through two (2) stacks (ID Stacks #5 and #6);
 - (7) one (1) Base coat flash off tunnel, exhausting through one (1) stack (ID Stack #7);
 - (8) one (1) Clear coat pump room, exhausting through one (1) stack (ID Stack #8);

- (9) one (1) Clear coat spray booth, equipped with a closed loop internal mix system and a water wash system for particulate matter overspray control, exhausting through one (1) stack (ID Stack #9);
- (10) one (1) Clear coat flash off tunnel, exhausting through one (1) stack (ID Stack #10);
- (11) one (1) convection curing oven, exhausting through three (3) stacks (ID Stacks #11, #12, and #13), equipped with two (2) indirect natural gas-fired heater boxes, each rated at 1.5 million British thermal units (MMBtu) per hour, exhausting through two (2) stacks (ID Stacks #14 and #15); and
- (12) one (1) clean room for unloading of painted parts.

Existing Approvals

The source applied for a Part 70 Operating Permit on August 25, 2000. The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP-133-5802-00019, issued on October 7, 1996;
- (b) CP-133-8608-00019, issued on October 6, 1997;
- (c) First Notice-only Change 133-10670-00019, issued on March 23, 1999; and
- (d) Exemption No. 133-11073-00019, issued on February 2, 2000.

Enforcement Issue

There are no pending enforcement actions related to this modification.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
1	Primer Mix	38	0.50	454	ambient
2	Primer Coat	45	2.17	16,800	ambient
3	Primer Flash Off	38	1.0	1,702	ambient
4	Base Mix	38	0.67	1,075	ambient
5	Base Coat	45	2.33	14,700	ambient
6	Base Coat	45	2.33	14,700	ambient
7	Base Flash Off	38	1.0	1,702	ambient
8	Clear Mix	38	0.50	403	ambient
9	Clear Coat	45	2.17	16,800	ambient
10	Clear Flash Off	38	1.17	2,371	ambient
11	Oven Exhaust	38	0.58	500	180
12	Oven Exhaust	38	0.58	500	180
13	Oven Exhaust	38	0.58	500	180
14	Heater Box Exhaust	34	0.75	N/A	500
15	Heater Box Exhaust	34	0.75	N/A	500

Recommendation

The staff recommends to the Commissioner that the Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 4, 2001. Additional information was received on June 8, 2001, July 31, 2001, and August 17, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (4 pages).

Potential To Emit Before Controls (Modification)

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential To Emit (tons/year)
PM	68.40
PM-10	68.48
SO ₂	0.01
VOC	122.54
CO	1.10
NO _x	1.31

HAP's	Potential To Emit (tons/year)
Xylene	less than 10
Toluene	less than 10
Ethyl Benzene	less than 10
MEK	less than 10
Isopropylbenzene	less than 10
TOTAL	less than 25

Justification for Modification

The Title V source is being modified through a Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(g).

County Attainment Status

The source is located in Putnam County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Putnam County has been designated as attainment or unclassifiable for ozone.

Source Status

Existing Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	less than 250
PM-10	less than 250
SO ₂	less than 250
VOC	less than 250
CO	less than 250
NO _x	less than 250

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon all previous approvals issued to this source.

Potential to Emit After Controls for the Modification

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Robot Paint Conveyor System	0.68	0.68	0.0	122.47	0.0	0.0	23.74
Two (2) heater boxes	0.02	0.10	0.01	0.07	1.10	1.31	<0.1
Total Emissions	0.70	0.78	0.01	122.54	1.10	1.31	23.74
PSD Significant Modification Threshold	250	250	250	250	250	250	N/A

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

- (b) This modification is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.390, Subpart MM (Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations). This rule applies to affected facilities in an automobile or light-duty truck assembly plant. Exempt from this rule are operations used to coat plastic body components or all-plastic automobile or light duty truck bodies on separate coating lines. H.A. Part Products of Indiana Company coats plastic automobile trim, not vehicle bodies, and does not assemble automobiles or light-duty trucks, therefore, the requirements of 40 CFR Part 60.390, Subpart MM do not apply.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of VOC and is located in Putnam County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which has the potential to emit (PTE) 10 tons per year of any single HAP or 25 tons per year of any combination of HAPs, must be controlled using technologies consistent with the Maximum Achievable Control Technology (MACT). The proposed robot paint conveyor system has potential single HAP emissions of less than 10 tons per year and potential emissions of any combination of HAPs of less than 25 tons per year, therefore, it is not subject to the requirements of this rule.

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the primer coat, base coat, and the clear coat spray booths of new robot paint conveyor system shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The closed loop internal mix system and a water wash system shall be in operation at all times the primer coat, base coat, and the clear coat spray booths of the new robot paint conveyor system are in operation, in order to comply with this limit.

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

This modification is subject to the provisions of 326 IAC 8-1-6. This rule requires all facilities constructed after January 1, 1980, which have potential VOC emission rates of greater than or equal to 25 tons per year, and which are not otherwise regulated by other provisions of 326 IAC 8, to reduce VOC emissions using Best Available Control Technology (BACT). Potential VOC emissions from the proposed robot paint conveyor system are greater than 25 tons per year, therefore, the modification is subject to this rule.

The first step in evaluating potential applicable control technologies involved a review of control technology determinations made for permitted sources in the plastic part surface coating industry. Based on a comprehensive review of USEPA's RACT /BACT /LAER clearinghouse (RBLC), the top five control technology determinations from similar facilities were identified. They are as follows listed in top-down order from the most effective to the least effective in terms of emission reduction potential/lowest emission rate:

- (1) Use of a catalytic incinerator at a maximum coating throughput of 14 gallons per hour and a maximum VOC content of 1.03 pounds of VOC per gallon of coating applied.
- (2) Use of reformulated coatings with a maximum VOC content of 3.5 pounds of VOC per gallon of coating.
- (3) Use of a thermal incinerator at a maximum coating throughput of 4,697 gallons of coating per month and a maximum VOC emission rate of 78.04 pounds per hour.
- (4) Use of HVLP applicators at a maximum VOC content of 6.3 pounds of VOC per gallon of coating.
- (5) Use of HVLP applicators at a maximum coating throughput of 2,480 gallons per month and a maximum VOC content of 6.08 pounds of VOC per gallon of coating.

Based on the above information, the following observations were made:

- (1) The above sources required to use add-on controls such as catalytic and thermal incinerators have maximum coating usages that are over two times greater than the proposed robot paint conveyor system. The resulting higher VOC emissions at those sources makes operation of those control options more likely to be economically feasible for those sources. A cost analysis was done as part of this BACT analysis on using catalytic and thermal oxidation to control VOC emissions. This is presented below.
- (2) The use of reformulated coatings with a maximum VOC content of 3.5 pounds of VOC per gallon of coating is currently being investigated by H.A. Parts Products of Indiana Company (HAPPICO). The use of these coatings requires customer approval making it infeasible to use these coatings at this time.
- (3) Use of HVLP applicators in the proposed robot paint conveyor system is considered a technically feasible control option.

Control technologies that could be potentially implemented are identified as follows:

- (1) Process Changes
 - (a) Use of waterborne coatings - these coatings are not used for exterior auto paint because of increased drying time and problems with color matching. Therefore, this option is technically infeasible.
 - (b) Use of powder coatings - these coatings have limited application for plastic parts. They require a high cure temperature and it is difficult to achieve the required quality. Therefore, this option is technically infeasible.

- (c) Use of high solids solvents - this option is currently being investigated by HAPPICO. Customer approval is required which prevents a determination being made at this time as to the technical feasibility of this option.
- (2) Equipment Modifications
 - (a) Use of HVLP paint guns - this option is technically feasible. HAPPICO is presently purchasing HVLP paint guns and plans to implement the application of HVLP paint guns by October, 2001.
- (3) Add-on Control Equipment
 - (a) Regenerative Thermal Oxidizer (RTO) - this option is technically feasible.
 - (b) Regenerative Catalytic Oxidizer (RCO) - this option is technically feasible.

The technically feasible options are RTO, RCO and use of HVLP spray guns. A cost analysis was performed to determine the economic feasibility of RTO and RCO for the VOC emissions from the proposed robot paint conveyor system. The cost analysis is based on potential VOC emissions of 122.47 tons per year.

The tables below show the results of the cost analysis.

(A)

Capital Cost

Option	Base Price	Direct Cost	Indirect Cost	Total
RTO or RCO*	933,842	338,400	117,612	1,389,854

* In doing the economic analysis, HAPPICO found the capital cost of the RTO and the RCO systems were close to being the same. If the capital cost of one system is a little less than the other, the operating cost will be higher. Therefore, for purposes of this analysis, HAPPICO used the RTO system costs for which a detailed vendor quote was obtained.

(B)

Annual Operating, Maintenance & Recovery Cost

Option	Direct Cost	Indirect Cost	Capital Recovery Cost	Total
RTO or RCO	495,591	77,194	339,124	911,909

(C)

Evaluation

Option	Potential Emissions (tons/yr)	Emissions Removed (tons/yr)	Control Efficiency (%)	\$/ton Removed
RTO or RCO	122.47	120.02	98	7,598

Methodology:

Emissions removed = (limited potential emissions from warehouse) * (control efficiency)

\$/ton removed = total annual cost / emissions removed

The cost breakdown is as follows:

1. Capital Cost
 - a) Base price: purchase price, auxiliary equipment, instruments, controls, taxes and freight.
 - b) Direct installation cost: foundations/supports, erection/handling, electrical, piping, insulation, painting, site preparation and building/facility.
 - c) Indirect installation cost: engineering, supervision, construction/filed expenses, construction fee, start up, performance test, model study and contingencies.

2. Annual Cost
 - a) Direct operating cost: operating labor (operator, supervisor), labor and material maintenance, operating materials, utilities (electricity, gas).
 - b) Indirect operating cost: overhead, property tax, insurance, administration and capital recovery cost (for 10 years life of the system at 10% interest rate).

Based on the cost analysis, RTO and RCO are economically infeasible. The annual cost of \$7,598 per ton of VOC removed would cause HAPICO's operation to be noncompetitive as a tier 1 automotive supplier. Therefore, no control with the use of HVLP spray guns is the only feasible option. HAPICO expects to reduce VOC emissions by 20% with the use of HVLP spray guns. The use of the HVLP spray guns and a maximum VOC emission rate of 122.47 tons per year has been determined to be BACT.

326 IAC 8-2-2 (Automobile and Light Duty Truck Coating Operations)

This modification is not subject to 326 IAC 8-2-2. The robot paint conveyor system only coats plastic automobile parts and does not assemble or coat automobile bodies, therefore, the requirements of 326 IAC 8-2-2 do not apply.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The new robot paint conveyor system is not subject to the requirements of this rule because it only coats plastic automotive parts and does not coat any metal parts.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The robot paint conveyor system primer coat spray booth, base coat spray booth, and clear coat spray booth have applicable compliance monitoring conditions as specified below:

- (a) Daily inspections shall be performed to verify the placement, integrity and particulate loading of the water wash system. To monitor the performance of the water wash system, weekly observations shall be made of the overspray from the surface coating booth stacks (Stack ID #2, #5, #6, and #9) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

These monitoring conditions are necessary because the water wash system for the robot paint conveyor system spray booths must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

Conclusion

The operation of this robot paint conveyor system shall be subject to the conditions of the attached proposed **Significant Source Modification No. 133-14228-00019**.

**Appendix A: Emission Calculations
VOC and Particulate
From Surface Coating Operations**

Company Name: H.A. Parts Products of Indiana Company
Address City IN Zip: 2200 State Route 240 East, Greencastle, Indiana 46135
Significant Source Modification No.: 133-14228
Pit ID: 133-00019
Reviewer: Trish Earls
Date: April 4, 2001

State Potential Emissions (uncontrolled):																		
Material (as applied)	Process	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	
New Robot Paint Line - Garnish FR Door R/H - L/H																		
L. Gray FG 27245	Primer	7.88	77.27%	0.00%	77.27%	0.00%	22.73%	0.0134	59.00	6.1	6.09	4.81	115.53	21.08	3.10	53.58	50.0%	
Cream White FG 26426	Base	9.96	39.76%	0.00%	39.76%	0.00%	60.24%	0.0230	59.00	4.0	3.96	5.37	128.97	23.54	17.83	13.15	50.0%	
Green Gray FG 26427	Base	7.95	67.35%	0.00%	67.35%	0.00%	32.65%	0.0288	59.00	5.4	5.35	9.10	218.35	39.85	9.66	32.80	50.0%	
Clear Coat FG 14217	Clear	8.09	61.70%	0.00%	61.70%	0.00%	38.30%	0.0272	59.00	5.0	4.99	8.01	192.25	35.09	10.89	26.07	50.0%	
														96.02	31.82			
New Robot Paint Line - Garnish RR Door R/H - L/H																		
L. Gray FG 27245	Primer	7.88	77.27%	0.00%	77.27%	0.00%	22.73%	0.0112	69.00	6.1	6.09	4.71	112.93	20.61	3.03	53.58	50.0%	
Cream White FG 26426	Base	9.96	39.76%	0.00%	39.76%	0.00%	60.24%	0.0198	69.00	4.0	3.96	5.41	129.85	23.70	17.95	13.15	50.0%	
Red Mica FG 25392	Base	7.83	67.43%	0.00%	67.43%	0.00%	32.57%	0.0251	69.00	5.3	5.28	9.14	219.46	40.05	9.67	32.42	50.0%	
Clear Coat FG 14217	Clear	8.09	61.70%	0.00%	61.70%	0.00%	38.30%	0.0231	69.00	5.0	4.99	7.96	190.94	34.85	10.82	26.07	50.0%	
														95.51	31.80			
New Robot Paint Line - Garnish RR Fender R/H - L/H																		
L. Gray FG 27245	Primer	7.88	77.27%	0.00%	77.27%	0.00%	22.73%	0.0268	30.00	6.1	6.09	4.90	117.49	21.44	3.15	53.58	50.0%	
Cream White FG 26426	Base	9.96	39.76%	0.00%	39.76%	0.00%	60.24%	0.0462	30.00	4.0	3.96	5.49	131.73	24.04	18.21	13.15	50.0%	
Red Mica FG 25392	Base	7.83	67.43%	0.00%	67.43%	0.00%	32.57%	0.0587	30.00	5.3	5.28	9.30	223.14	40.72	9.84	32.42	50.0%	
Clear Coat FG 14217	Clear	8.09	61.70%	0.00%	61.70%	0.00%	38.30%	0.0544	30.00	5.0	4.99	8.15	195.51	35.68	11.07	26.07	50.0%	
														97.85	32.44			
New Robot Paint Line - Side Sill R/H - L/H																		
L. Gray FG 27245	Primer	7.88	77.27%	0.00%	77.27%	0.00%	22.73%	0.0134	63.00	6.1	6.09	5.14	123.37	22.51	5.63	178.59	15.0%	
Cream White FG 26426	Base	9.96	39.76%	0.00%	39.76%	0.00%	60.24%	0.0217	63.00	4.0	3.96	5.41	129.93	23.71	30.54	43.83	15.0%	
Red Mica FG 25392	Base	7.83	67.43%	0.00%	67.43%	0.00%	32.57%	0.0276	63.00	5.3	5.28	9.18	220.33	40.21	16.51	108.07	15.0%	
Clear Coat FG 14217	Clear	8.09	61.70%	0.00%	61.70%	0.00%	38.30%	0.0255	63.00	5.0	4.99	8.02	192.45	35.12	18.53	86.88	15.0%	
														97.85	54.70			
New Robot Paint Line - Garnish FR FF R/H - L/H																		
L. Gray FG 27245	Primer	7.88	77.27%	0.00%	77.27%	0.00%	22.73%	0.0045	127.00	6.1	6.09	3.48	83.52	15.24	2.24	53.58	50.0%	
Cream White FG 26426	Base	9.96	39.76%	0.00%	39.76%	0.00%	60.24%	0.0108	127.00	4.0	3.96	5.43	130.36	23.79	18.02	13.15	50.0%	
Green Gray FG 26427	Base	7.95	67.35%	0.00%	67.35%	0.00%	32.65%	0.0136	127.00	5.4	5.35	9.25	221.95	40.51	9.82	32.80	50.0%	
Clear Coat FG 14217	Clear	8.09	61.70%	0.00%	61.70%	0.00%	38.30%	0.0119	127.00	5.0	4.99	7.54	181.05	33.04	10.26	26.07	50.0%	
														88.79	30.52			
New Robot Paint Line - Tailgate																		
L. Gray FG 27245	Primer	7.88	77.27%	0.00%	77.27%	0.00%	22.73%	0.0179	44.00	6.1	6.09	4.80	115.09	21.00	5.25	178.59	15.0%	
Cream White FG 26426	Base	9.96	39.76%	0.00%	39.76%	0.00%	60.24%	0.0308	44.00	4.0	3.96	5.37	128.80	23.51	30.27	43.83	15.0%	
Red Mica FG 25392	Base	7.83	67.43%	0.00%	67.43%	0.00%	32.57%	0.0392	44.00	5.3	5.28	9.11	218.56	39.89	16.38	108.07	15.0%	
Clear Coat FG 14217	Clear	8.09	61.70%	0.00%	61.70%	0.00%	38.30%	0.0367	44.00	5.0	4.99	8.06	193.45	35.30	18.63	86.88	15.0%	
														96.20	54.15			
New Robot Paint Line - Fuel Cap Cover																		
L. Gray FG 27245	Primer	7.88	77.27%	0.00%	77.27%	0.00%	22.73%	0.0018	354.00	6.1	6.09	3.88	93.12	16.99	2.50	53.58	50.0%	
Cream White FG 26426	Base	9.96	39.76%	0.00%	39.76%	0.00%	60.24%	0.0039	354.00	4.0	3.96	5.47	131.22	23.95	18.14	13.15	50.0%	
Red Mica FG 25392	Base	7.83	67.43%	0.00%	67.43%	0.00%	32.57%	0.0049	354.00	5.3	5.28	9.16	219.80	40.11	9.69	32.42	50.0%	
Clear Coat FG 14217	Clear	8.09	61.70%	0.00%	61.70%	0.00%	38.30%	0.0034	354.00	5.0	4.99	6.01	144.19	26.31	8.17	26.07	50.0%	
														83.42	28.81			
New Robot Paint Line - Radiator Grille																		
L. Gray FG 27245	Primer	7.88	77.27%	0.00%	77.27%	0.00%	22.73%	0.0045	178.00	6.1	6.09	4.88	117.05	21.36	5.66	267.88	10.0%	
Cream White FG 26426	Base	9.96	39.76%	0.00%	39.76%	0.00%	60.24%	0.0077	178.00	4.0	3.96	5.43	130.26	23.77	32.42	65.74	10.0%	
Green Gray FG 26427	Base	7.95	67.35%	0.00%	67.35%	0.00%	32.65%	0.0096	178.00	5.4	5.35	9.15	219.59	40.07	17.48	163.99	10.0%	
Clear Coat FG 14217	Clear	8.09	61.70%	0.00%	61.70%	0.00%	38.30%	0.0000	0.00	5.0	4.99	0.00	0.00	0.00	0.00	130.33	10.0%	
														61.44	38.07			
Total State Potential Emissions:												22.34	536.14	97.85	54.70			
Federal Potential Emissions (controlled):																		
										Control Efficiency:		Controlled VOC lbs per Hour	Controlled VOC lbs per Day	Controlled VOC tons per Year	Controlled PM tons/yr			
										VOC	PM							
Total Federal Potential Emissions:										0.00%	99.00%	22.34	536.14	97.85	0.55			

Note: Only the worst case base coatings for VOC and PM are shown.

Methodology:

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1-Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids) * Transfer Efficiency

Total = Worst Coating + Sum of all solvents used

Controlled emission rate = uncontrolled emission rate * (1 - control efficiency)

Appendix A: HAP Emission Calculations

Company Name: H.A. Parts Products of Indiana Company
Address City IN Zip: 2200 State Route 240 East, Greencastle, Indiana 46135
Significant Source Modification No.: 133-14228
PIT ID: 133-00019
Reviewer: Trish Earls
Date: April 4, 2001

Material	Process	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Ethyl Benzene	Weight % MEK	Weight % Toluene	Weight % Isopropyl benzene	Xylene Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	MEK Emissions (ton/yr)	Toluene Emissions (ton/yr)	Isopropylbenzene Emissions (ton/yr)
New Robot Paint Line - Garnish FR Door R/H - L/H														
L Gray FG 27245	Primer	7.88	0.0134	59.00	2.72%	6.42%	0.00%	4.69%	0.00%	0.74	1.75	0.00	1.28	0.00
Green Mica FG 26425	Base	8.04	0.0285	59.00	6.07%	2.04%	0.97%	0.13%	0.00%	3.59	1.21	0.57	0.08	0.00
Cream White FG 26426	Base	9.96	0.0230	59.00	0.78%	0.04%	0.11%	0.14%	0.00%	0.46	0.02	0.07	0.08	0.00
Black Mica FG 23065	Base	7.80	0.0294	59.00	6.31%	1.46%	0.71%	0.13%	0.00%	3.74	0.87	0.42	0.08	0.00
Green Gray FG 26427	Base	7.95	0.0288	59.00	5.29%	2.56%	1.19%	0.11%	0.00%	3.13	1.51	0.70	0.07	0.00
Red Mica FG 25392	Base	7.83	0.0293	59.00	5.81%	1.29%	0.62%	0.12%	0.00%	3.44	0.76	0.37	0.07	0.00
Dark Blue FG 22215	Base	8.04	0.0285	59.00	1.07%	6.60%	0.96%	0.09%	0.00%	0.63	3.91	0.57	0.05	0.00
Rio Red FG 23291	Base	8.26	0.0277	59.00	6.61%	3.59%	1.64%	0.13%	0.06%	3.91	2.12	0.97	0.08	0.04
Warm Gray FG 26445	Base	7.98	0.0288	59.00	5.66%	0.91%	0.46%	0.11%	0.00%	3.36	0.54	0.27	0.07	0.00
Clear Coat FG 14217	Clear	8.09	0.0272	59.00	1.38%	0.00%	0.00%	9.00%	0.00%	0.78	0.00	0.00	5.12	0.00
										5.43	5.66	0.97	6.48	0.04
New Robot Paint Line - Garnish RR Door R/H - L/H														
L Gray FG 27245	Primer	7.88	0.0112	69.00	2.72%	6.42%	0.00%	4.69%	0.00%	0.73	1.71	0.00	1.25	0.00
Green Mica FG 26425	Base	8.04	0.0245	69.00	6.07%	2.04%	0.97%	0.13%	0.00%	3.61	1.21	0.58	0.08	0.00
Cream White FG 26426	Base	9.96	0.0198	69.00	0.78%	0.04%	0.11%	0.14%	0.00%	0.46	0.02	0.07	0.08	0.00
Black Mica FG 23065	Base	7.80	0.0252	69.00	6.31%	1.46%	0.71%	0.13%	0.00%	3.75	0.87	0.42	0.08	0.00
Green Gray FG 26427	Base	7.95	0.0248	69.00	5.29%	2.56%	1.19%	0.11%	0.00%	3.15	1.53	0.71	0.07	0.00
Red Mica FG 25392	Base	7.83	0.0251	69.00	5.81%	1.29%	0.62%	0.12%	0.00%	3.45	0.77	0.37	0.07	0.00
Dark Blue FG 22215	Base	8.04	0.0246	69.00	1.07%	6.60%	0.96%	0.09%	0.00%	0.64	3.95	0.57	0.05	0.00
Rio Red FG 23291	Base	8.26	0.0238	69.00	6.61%	3.59%	1.64%	0.13%	0.06%	3.93	2.13	0.97	0.08	0.04
Warm Gray FG 26445	Base	7.98	0.0247	69.00	5.66%	0.91%	0.46%	0.11%	0.00%	3.37	0.54	0.27	0.07	0.00
Clear Coat FG 14217	Clear	8.09	0.0231	69.00	1.38%	0.00%	0.00%	9.00%	0.00%	0.78	0.00	0.00	5.08	0.00
										5.43	5.66	0.97	6.42	0.04
New Robot Paint Line - Garnish RR Fender R/H - L/H														
L Gray FG 27245	Primer	7.88	0.0268	30.00	2.72%	6.42%	0.00%	4.69%	0.00%	0.75	1.78	0.00	1.30	0.00
Green Mica FG 26425	Base	8.04	0.0572	30.00	6.07%	2.04%	0.97%	0.13%	0.00%	3.67	1.23	0.59	0.08	0.00
Cream White FG 26426	Base	9.96	0.0462	30.00	0.78%	0.04%	0.11%	0.14%	0.00%	0.47	0.02	0.07	0.08	0.00
Black Mica FG 23065	Base	7.80	0.0590	30.00	6.31%	1.46%	0.71%	0.13%	0.00%	3.82	0.88	0.43	0.08	0.00
Green Gray FG 26427	Base	7.95	0.0579	30.00	5.29%	2.56%	1.19%	0.11%	0.00%	3.20	1.55	0.72	0.07	0.00
Red Mica FG 25392	Base	7.83	0.0587	30.00	5.81%	1.29%	0.62%	0.12%	0.00%	3.51	0.78	0.37	0.07	0.00
Dark Blue FG 22215	Base	8.04	0.0572	30.00	1.07%	6.60%	0.96%	0.09%	0.00%	0.65	3.99	0.58	0.05	0.00
Rio Red FG 23291	Base	8.26	0.0557	30.00	6.61%	3.59%	1.64%	0.13%	0.06%	4.00	2.17	0.99	0.08	0.04
Warm Gray FG 26445	Base	7.98	0.0578	30.00	5.66%	0.91%	0.46%	0.11%	0.00%	3.43	0.55	0.28	0.07	0.00
Clear Coat FG 14217	Clear	8.09	0.0544	30.00	1.38%	0.00%	0.00%	9.00%	0.00%	0.80	0.00	0.00	5.20	0.00
										5.55	5.77	0.99	6.59	0.04
New Robot Paint Line - Side Sill R/H - L/H														
L Gray FG 27245	Primer	7.88	0.0134	63.00	2.72%	6.42%	0.00%	4.69%	0.00%	0.79	1.87	0.00	1.37	0.00
Green Mica FG 26425	Base	8.04	0.0268	63.00	6.07%	2.04%	0.97%	0.13%	0.00%	3.61	1.21	0.58	0.08	0.00
Cream White FG 26426	Base	9.96	0.0217	63.00	0.78%	0.04%	0.11%	0.14%	0.00%	0.47	0.02	0.07	0.08	0.00
Black Mica FG 23065	Base	7.80	0.0277	63.00	6.31%	1.46%	0.71%	0.13%	0.00%	3.76	0.87	0.42	0.08	0.00
Green Gray FG 26427	Base	7.95	0.0271	63.00	5.29%	2.56%	1.19%	0.11%	0.00%	3.14	1.52	0.71	0.07	0.00
Red Mica FG 25392	Base	7.83	0.0275	63.00	5.81%	1.29%	0.62%	0.12%	0.00%	3.45	0.77	0.37	0.07	0.00
Dark Blue FG 22215	Base	8.04	0.0269	63.00	1.07%	6.60%	0.96%	0.09%	0.00%	0.64	3.94	0.57	0.05	0.00
Rio Red FG 23291	Base	8.26	0.0261	63.00	6.61%	3.59%	1.64%	0.13%	0.06%	3.93	2.14	0.98	0.08	0.04
Warm Gray FG 26445	Base	7.98	0.0271	63.00	5.66%	0.91%	0.46%	0.11%	0.00%	3.38	0.54	0.27	0.07	0.00
Clear Coat FG 14217	Clear	8.09	0.0255	63.00	1.38%	0.00%	0.00%	9.00%	0.00%	0.78	0.00	0.00	5.12	0.00
										5.51	5.81	0.98	6.57	0.04
New Robot Paint Line - Garnish FR FF R/H - L/H														
L Gray FG 27245	Primer	7.88	0.0045	127.00	2.72%	6.42%	0.00%	4.69%	0.00%	0.54	1.27	0.00	0.93	0.00
Green Mica FG 26425	Base	8.04	0.0133	127.00	6.07%	2.04%	0.97%	0.13%	0.00%	3.61	1.21	0.58	0.08	0.00
Cream White FG 26426	Base	9.96	0.0108	127.00	0.78%	0.04%	0.11%	0.14%	0.00%	0.47	0.02	0.07	0.08	0.00
Black Mica FG 23065	Base	7.80	0.0138	127.00	6.31%	1.46%	0.71%	0.13%	0.00%	3.78	0.87	0.43	0.08	0.00
Green Gray FG 26427	Base	7.95	0.0136	127.00	5.29%	2.56%	1.19%	0.11%	0.00%	3.18	1.54	0.71	0.07	0.00
Red Mica FG 25392	Base	7.83	0.0137	127.00	5.81%	1.29%	0.62%	0.12%	0.00%	3.47	0.77	0.37	0.07	0.00
Dark Blue FG 22215	Base	8.04	0.0133	127.00	1.07%	6.60%	0.96%	0.09%	0.00%	0.64	3.93	0.57	0.05	0.00
Rio Red FG 23291	Base	8.26	0.0130	127.00	6.61%	3.59%	1.64%	0.13%	0.06%	3.95	2.14	0.98	0.08	0.04
Warm Gray FG 26445	Base	7.98	0.0135	127.00	5.66%	0.91%	0.46%	0.11%	0.00%	3.39	0.55	0.28	0.07	0.00
Clear Coat FG 14217	Clear	8.09	0.0119	127.00	1.38%	0.00%	0.00%	9.00%	0.00%	0.74	0.00	0.00	4.82	0.00
										5.22	5.19	0.98	5.83	0.04
New Robot Paint Line - Tailgate														
L Gray FG 27245	Primer	7.88	0.0179	44.00	2.72%	6.42%	0.00%	4.69%	0.00%	0.74	1.75	0.00	1.27	0.00
Green Mica FG 26425	Base	8.04	0.0381	44.00	6.07%	2.04%	0.97%	0.13%	0.00%	3.58	1.20	0.57	0.08	0.00
Cream White FG 26426	Base	9.96	0.0308	44.00	0.78%	0.04%	0.11%	0.14%	0.00%	0.46	0.02	0.07	0.08	0.00
Black Mica FG 23065	Base	7.80	0.0393	44.00	6.31%	1.46%	0.71%	0.13%	0.00%	3.73	0.86	0.42	0.08	0.00
Green Gray FG 26427	Base	7.95	0.0386	44.00	5.29%	2.56%	1.19%	0.11%	0.00%	3.13	1.51	0.70	0.07	0.00
Red Mica FG 25392	Base	7.83	0.0392	44.00	5.81%	1.29%	0.62%	0.12%	0.00%	3.44	0.76	0.37	0.07	0.00
Dark Blue FG 22215	Base	8.04	0.0381	44.00	1.07%	6.60%	0.96%	0.09%	0.00%	0.63	3.90	0.57	0.05	0.00
Rio Red FG 23291	Base	8.26	0.0371	44.00	6.61%	3.59%	1.64%	0.13%	0.06%	3.90	2.12	0.97	0.08	0.04
Warm Gray FG 26445	Base	7.98	0.0385	44.00	5.66%	0.91%	0.46%	0.11%	0.00%	3.35	0.54	0.27	0.07	0.00
Clear Coat FG 14217	Clear	8.09	0.0367	44.00	1.38%	0.00%	0.00%	9.00%	0.00%	0.79	0.00	0.00	5.15	0.00
										5.43	5.64	0.97	6.51	0.04
New Robot Paint Line - Fuel Cap Cover														
L Gray FG 27245	Primer	7.88	0.0018	354.00	2.72%	6.42%	0.00%	4.69%	0.00%	0.60	1.41	0.00	1.03	0.00
Green Mica FG 26425	Base	8.04	0.0048	354.00	6.07%	2.04%	0.97%	0.13%	0.00%	3.63	1.22	0.58	0.08	0.00
Cream White FG 26426	Base	9.96	0.0039	354.00	0.78%	0.04%	0.11%	0.14%	0.00%	0.47	0.02	0.07	0.08	0.00
Black Mica FG 23065	Base	7.80	0.0049	354.00	6.31%	1.46%	0.71%	0.13%	0.00%	3.74	0.87	0.42	0.08	0.00
Green Gray FG 26427	Base	7.95	0.0048	354.00	5.29%	2.56%	1.19%	0.11%	0.00%	3.13	1.51	0.70	0.07	0.00
Red Mica FG 25392	Base	7.83	0.0049	354.00	5.81%	1.29%	0.62%	0.12%	0.00%	3.46	0.77	0.37	0.07	0.00
Dark Blue FG 22215	Base	8.04	0.0048	354.00	1.07%	6.60%	0.96%	0.09%	0.00%	0.64	3.95	0.57	0.05	0.00
Rio Red FG 23291	Base	8.26	0.0047	354.00	6.61%	3.59%	1.64%	0.13%	0.06%	3.98	2.16	0.99	0.08	0.04
Warm Gray FG 26445	Base	7.98	0.0048	354.00	5.66%	0.91%	0.46%	0.11%	0.00%	3.36	0.54	0.27		

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: H.A. Parts Products of Indiana Company
Address City IN Zip: 2200 State Route 240 East, Greencastle, Indiana 46135
Significant Source Modification No.: 133-14228
Pit ID: 133-00019
Reviewer: Trish Earls
Date: April 4, 2001

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

3.0

26.3

Heat Input Capacity includes two (2) heater boxes for the convection curing oven each rated at 1.5 MMBtu/hr.

Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.02	0.10	0.01	1.31	0.07	1.10

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 4 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only**

Page 4 of 4 TSD App A

MM BTU/HR <100

HAPs Emissions

Company Name: H.A. Parts Products of Indiana Company
Address City IN Zip: 2200 State Route 240 East, Greencastle, Indiana 46135
Significant Source Modification No.: 133-14228
Plt ID: 133-00019
Reviewer: Trish Earls
Date: April 4, 2001

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	2.759E-05	1.577E-05	9.855E-04	2.365E-02	4.468E-05

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	6.570E-06	1.445E-05	1.840E-05	4.993E-06	2.759E-05

Methodology is the same as page 3.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.